Claims:

1. A method for preparing oxytitanium phthalocyanine as a charge generating material, comprising the steps of:

homogeneously mixing an oxytitanium phthalocyanine crude with an organic solvent while microwave energy having a frequency of 0.1~100 GHz and a power of 10~3,000W and ultrasonic wave energy having a frequency of 1~1,000 kHz and a power of 10~5,000W are applied thereto; and

reacting the mixture at 30~100°C for 0.5~5 hours.

2. The method according to claim 1, wherein the oxytitanium phthalocyanine crude is dissolved in an acid at room temperature or more and recrystallized, or dry- or wet-ground before use.

3. The method according to claim 2, wherein the acid is sulfuric acid, phosphoric acid, or a halogenated carboxylic acid.

4. The method according to claim 2, wherein the solvent for the recrystallization is water, an aliphatic or aromatic alcohol, a ketone, an ether, an ester, or a mixed solution thereof.

5. The method according to claim 1, wherein the organic solvent is a halogenated benzene, a halogenated naphthalene, or an aqueous solution thereof.

6. The method according to claim 5, wherein the halogenated benzene or

halogenated naphthalene is benzene or naphthalene substituted with 1 to 4 halogen atoms selected from chlorine, fluorine, bromine, and iodine.

7. The method according to claim 1, wherein the reaction is carried out at a temperature of 50~70°C.

8. The method according to claim 1, wherein the reaction time is in the range of from 10 minutes to 5 hours.

9. The method according to claim 1, wherein the oxytitanium phthalocyanine crude shows one X-ray diffraction peak at a Bragg angle of 27.2 ± 0.2°.

10. An apparatus for preparing oxytitanium phthalocyanine as a charge generating material, comprising: a magnetron capable of generating a frequency of 0.1~100GHz and a power of 100~3,000W; a mode stirrer for making the wavelength of microwaves uniform in a microwave container; a PID type temperature controller for accurately measuring and controlling the temperature of reactants; a K-type thermocouple shielded from microwaves; a condenser; an agitator, the thermocouple, the condenser and the agitator being inserted into three openings formed at a top of the microwave container; an ultrasonic tip inserted into an opening formed at a bottom of the microwave container; a Pyrex container into which the reactants are introduced; and a solvent tank,

wherein an oxytitanium phthalocyanine crude is homogeneously mixed with an organic solvent within the Pyrex container while microwave energy having a frequency of 0.1~100 GHz and a power of 10~3,000W and ultrasonic wave energy

having a frequency of 1~1,000 kHz and a power of 10~5,000W are applied thereto, and the reactants are reacted with each other at a temperature of 30~100°C for 0.5~5 hours while the temperature of the reactants is accurately controlled by the K-type thermocouple and the PID type temperature controller.

11. The apparatus according to claim 10, wherein the oxytitanium phthalocyanine crude is dissolved in an acid at room temperature or more and recrystallized, or dry- or wet-ground before use.

12. The apparatus according to claim 11, wherein the acid is sulfuric acid, phosphoric acid, or a halogenated carboxylic acid.

13. The apparatus according to claim 11, wherein the solvent for the recrystallization is water, an aliphatic or aromatic alcohol, a ketone, an ether, an ester, or a mixed solution thereof.

14. The apparatus according to claim 10, wherein the organic solvent is a halogenated benzene, a halogenated naphthalene, or an aqueous solution thereof.

15. The apparatus according to claim 14, wherein the halogenated benzene or halogenated naphthalene is benzene or naphthalene substituted with 1 to 4 halogen atoms selected from chlorine, fluorine, bromine, and iodine.

16. The apparatus according to claim 10, wherein the reaction is carried out at a temperature of 50~70°C.

17. The apparatus according to claim 10, wherein the reaction time is in the range of from 10 minutes to 5 hours.

18. The apparatus according to claim 10, wherein the oxytitanium phthalocyanine crude shows one X-ray diffraction peak at a Bragg angle of 27.2 ± 0.2°.

19. An oxytitanium phthalocyanine charge generating material prepared by the method according to claim 1 wherein the charge generating material shows X-ray diffraction peaks at Bragg angles of 7.2 ± 0.2°, 9.6° ± 0.2°, 11.7° ± 0.2°, 12.7° ± 0.2°, 13.4° ± 0.2°, 14.1° ± 0.2°, 14.8° ± 0.2°, 18.0° ± 0.2°, 18.4° ± 0.2°, 22.3° ± 0.2°, 23.4° ± 0.2°, 24.1° ± 0.2°, 24.5° ± 0.2°, and 27.2° ± 0.2°.

20. A photoconductor produced using the oxytitanium phthalocyanine charge generating material according to claim 19.